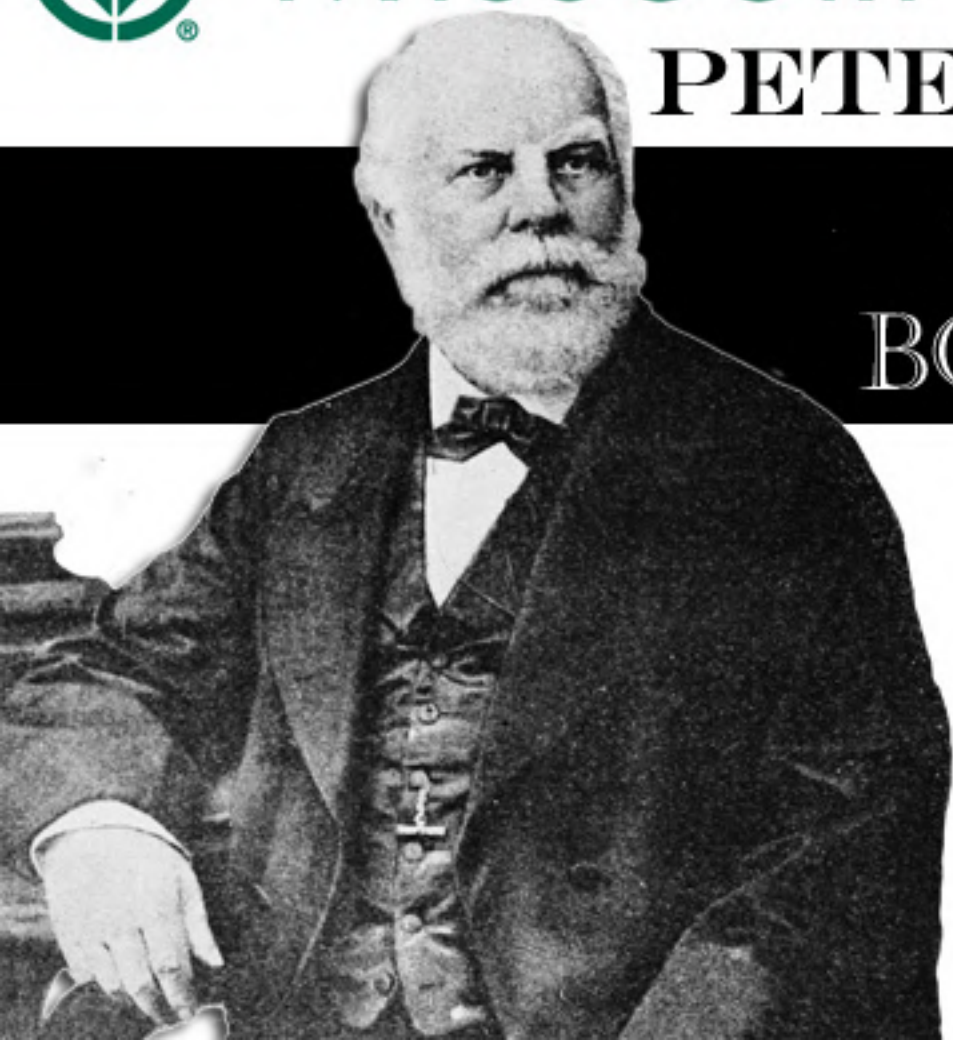


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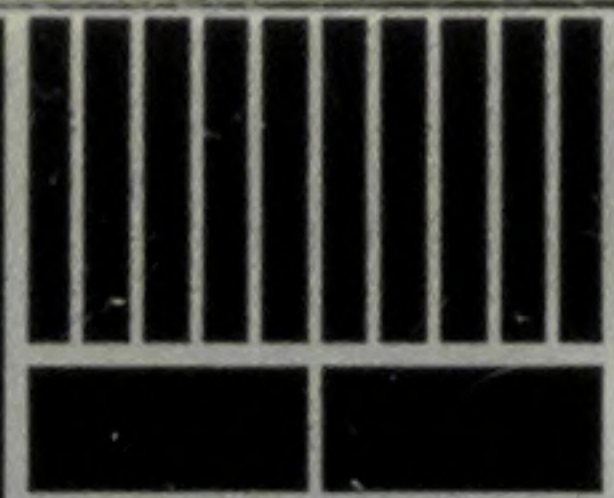
GEORGE ENGELMANN
BOTANICAL NOTEBOOKS



Pagination Note:

Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

All *Rhodostigma* have
the hilum much wider behind
than before 1579
and corresponding with this
an anterior carina of seed. The posterior
embryo blunt at saddle end not rounded



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cm

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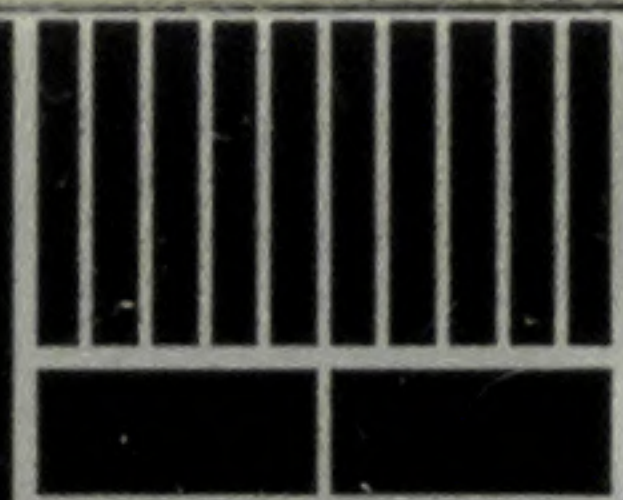
MISSOURI
BOTANICAL
GARDEN

**JONES & LEITCH,
DRUGGISTS**

**COR. FIFTH & MARKET STREETS,
ST. LOUIS, MO.**

J. M. Kiltrick & Co. Cor Main & Vine.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



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xinie verbunden, wie das Profil einer Griechin. Vom germanischen Stamme waren Leontinens Augen; blau, schwärmerisch, romantisch. Die Zähne untadelig und das Haar von einer Fülle, daß es, aufgelöst, wenn nicht die Fersen der kleinen Füße, doch die Knie hätte erreichen können. Es gab in der Residenz Gestalten von einer beim ersten Anblicke eindrucksvollen Schönheit, Musterbilder des Wachstums und der Formvollendung, aber wenige von Leontinens einschmeichelnem Zauber im Gesamteindrucke. Und sie hatte auch noch den Namen dafür. Die junge Welt streifte am sogenannten Hohen Graben, dem Quartier der Banquiers, vor den Fenstern der „schönen Welt,“ wie man sie nannte, mit allen Ausdrücken der Huldigung vorüber, die für ein meist unter hohen tropischen Pflanzen am Fenster stehendes oder lesendes junges Mädchen nur im Aufblide gesunder oder in der Schärfung schwacher Augen durch vorwiegige Lorgnetten liegen

Ihr Vater, Nathan Simonis, besaß die übliche praktische Lebensauffassung. Man konnte von ihm sagen, er hätte des weisen Nathan Namen deshalb gehabt, weil, wie der Derwisch sagt, seinem Volke eben der Reiche der Weise ist. Die Mutter, wenn sie mehr Bildung besessen hätte, würde das Leben schon mehr nach Leontinens Art gefaßt haben. Der prächtige Name, den sie ihrem Kinde statt des ursprünglichen Lea zugestanden hatte, war eine Huldigung der guten Frau an die Welt des Schönen, ein Act der Anerkennung wenigstens für manche Sprachkenntnisse, die Madame Simonis aus ihrem Jugendunterrichte gerettet hatte. Leontinens Brüder, Vettern, Oheime freilich lebten nur unter materiellen Lebensbedingungen, Eisenbahnactien, Curszetteln, Bankausweisen; doch sorgte schon die Mutter dafür, daß diese Grundlagen ihrer zu größtem Vertrauen des Publicums behaupteten Namen nicht auch gar zu breit sich ausdehnen durf-

graminis rectanguli maj.

Sellowianus

Corynodes

acutatus

erharenus

gram. hemisphaer. gemin. macromulosa

submacromulosa

21

1579A



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cm

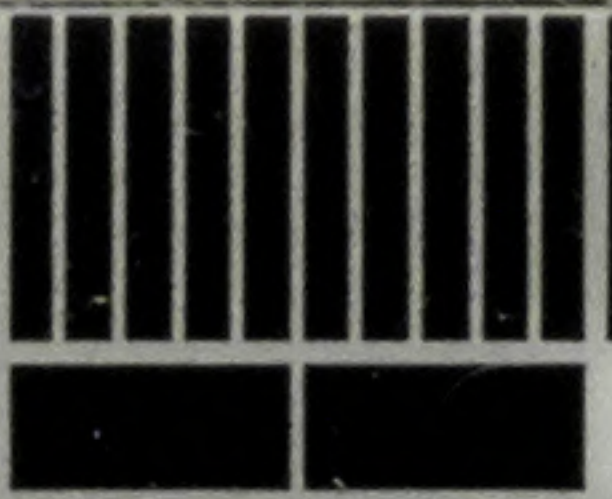
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Jahre zählte. Es ist und bleibt eine schöne Eigenthümlichkeit bei Reontinens Glaubensgenossen, daß sie junge Mädchen die Freiheit und Hoffe ihres älterlichen Hauses möglichst lange genießen lassen. Sie verträumen meist alle ziemlich lange ein glückliches von Liebe gehegtes Dasein im Aelternhause, bis sie einem inzwischen meist leider durch kaufmännische Berechnungen vermittelten Loose anheimfallen. Reontine war eine gefeierte Schönheit; hundert christliche Bewerber würden sich schon längst und schon von ihrem sechszehnten Jahre an für sie gefunden haben; aber da sie unter den Christen, oder wie Moritz Sando, der Dichter, gesagt haben würde, innerhalb des Schutts, verheirathet werden mußte, so zog sich die Entscheidung über die Bestimmung ihres Schicksals jetzt schon bis in ihr zwanzigstes Lebensjahr hinaus. Die geheimen Kinder-

angewandten. Zur Zeit der Geburt des Kindes 3. B. hätte sie alle Parteen aufgegeben, von denen um sie her doch zuweilen gestürzt wurde . . . ein Flüßchen das ihr immer den Einbruch machte, als wenn sie, sitzend in ihrem Zimmer unter den breiten Blättern eines riesigen Baumbaums, blätternd in Gottfried Kinkel's „Lied der Schütz," vom drei oder vier Zimmer weit entfernten Comptoir ihres Vaters herüber das Muschbüttel von Geldsäcken vernahm. Dieser Silberklang an sich war nicht unpoetisch, er war ihr auch nicht verhaßt, aber er war außerordentlich gewöhnlich. Er brühte bei ihr das Alltägliche aus. Das Gelbeinnehmen und Geldgewinnen klang ihr fast so, als wenn sie jeden Morgen die tiefensten Forderungen ihrer Mutter beobachten mußte, wenn diese mit einer fast contemplativen inneren Mystik den täglichen Rückengettel er fand.



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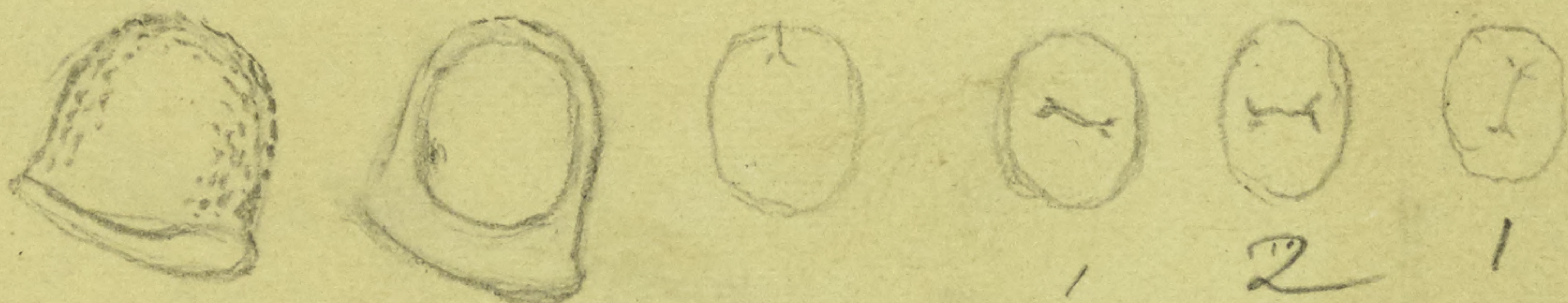
Echin. mammosus Lem.

May 26 1870

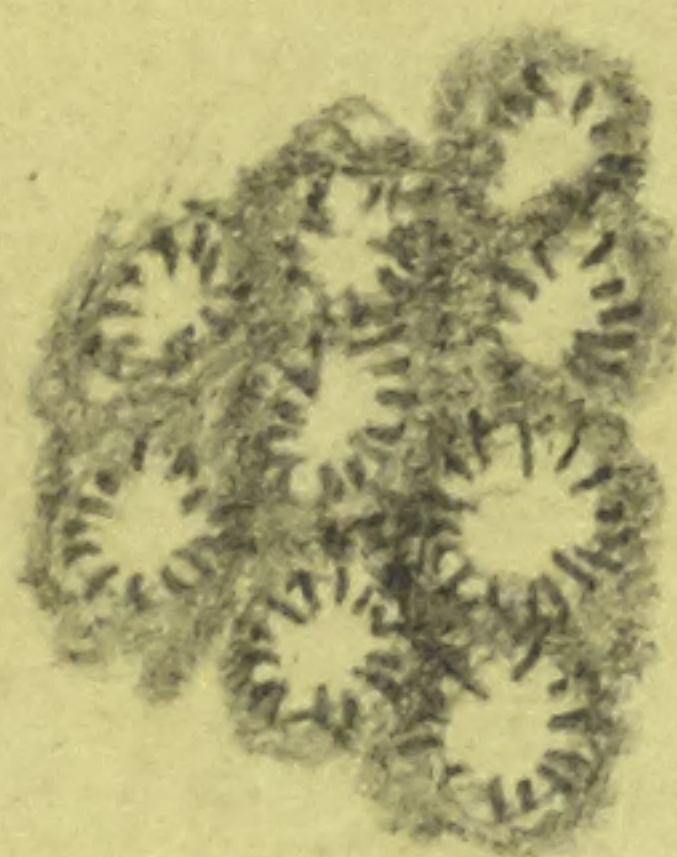
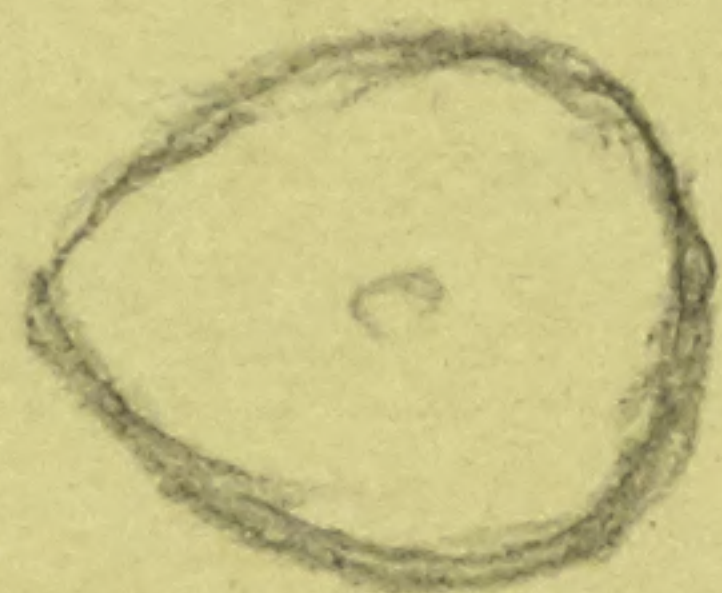
Vienna, Baumann 1857

x 7

1580



inter



surface of seed brown
x 60

tubercles minute
shell not rugulose



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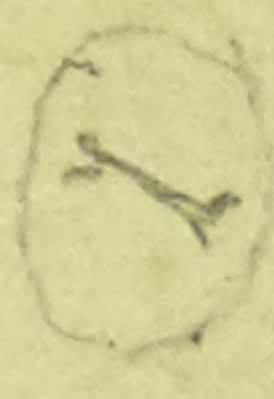
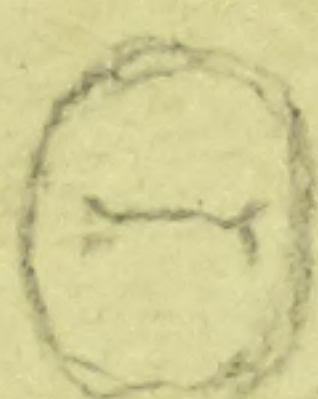
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Echin submammosus Lem. May 26 1870
Vienna, Baumann, 1857

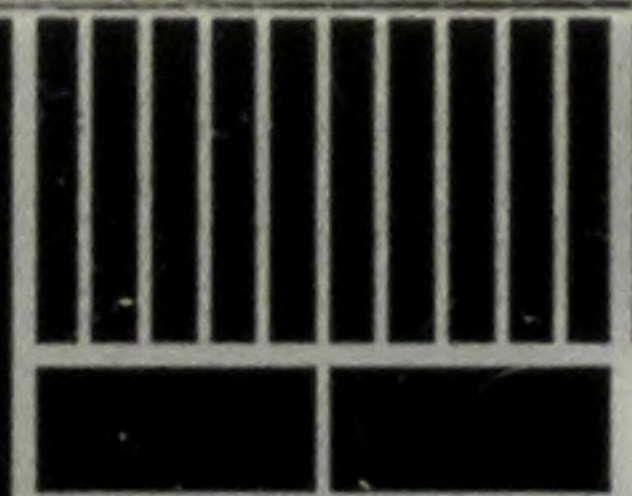
x8



surface of seed brown
x60

tuberous, minute
slightly stellate rugulose

1581



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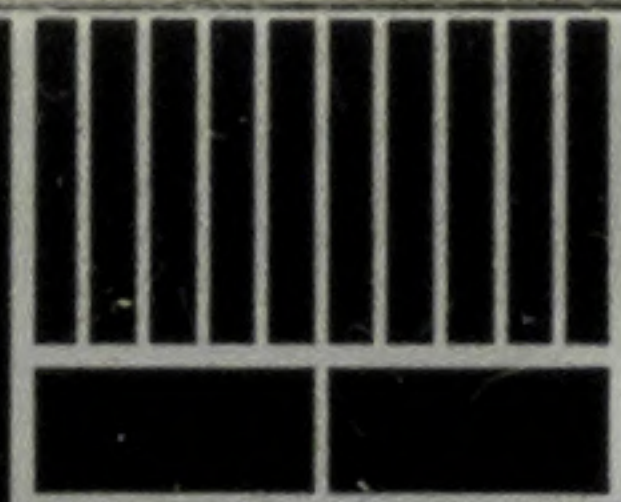
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Ech. Couraui

June 1 1870

males.

(Sgn. *E. leptocaulis* Link & Otto

Sencke, Leipzig,

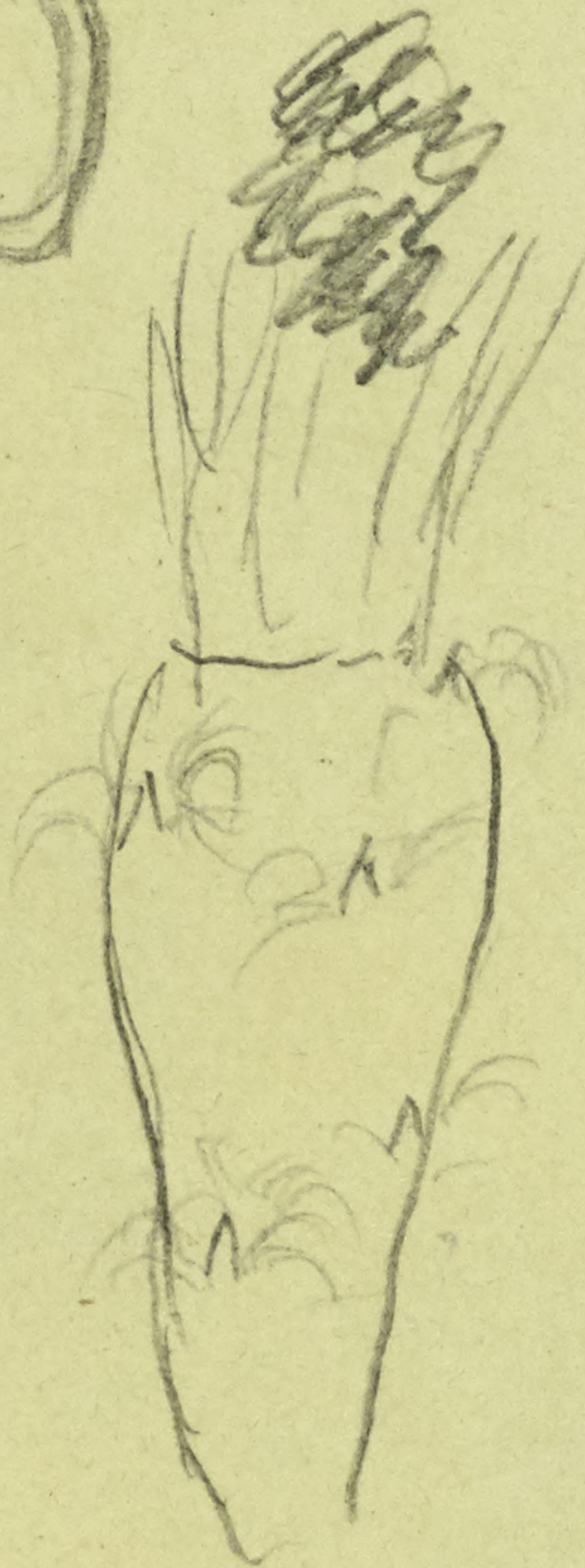
vide Labouret p. 170

March 1857

Seed most like *Sellowiana*
& *acutata*



surface x60



Sketch of fruit
made at the time
(1857)

1582



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Pch. acutatus Link & Otto

May 27 1870

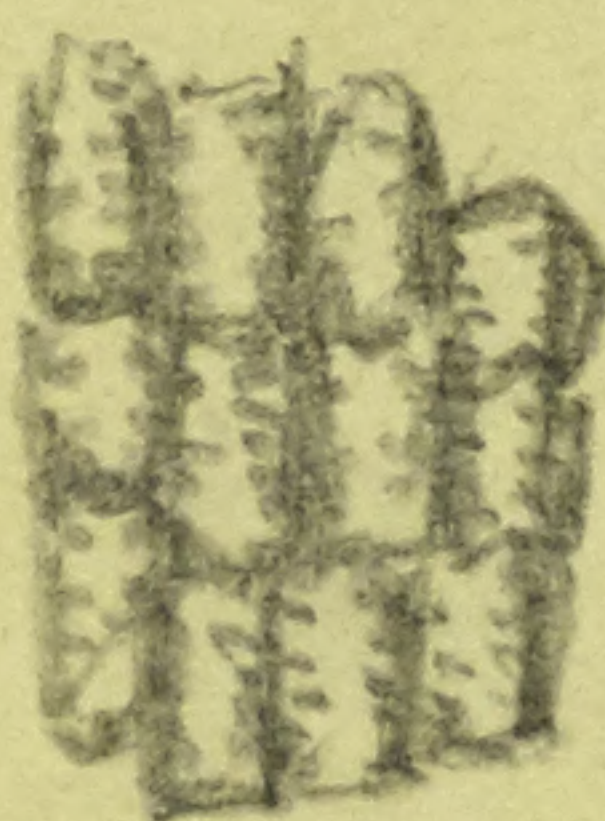
Berlin 1853.

Baccharis Lind 1857.

x 8



x 60



1583



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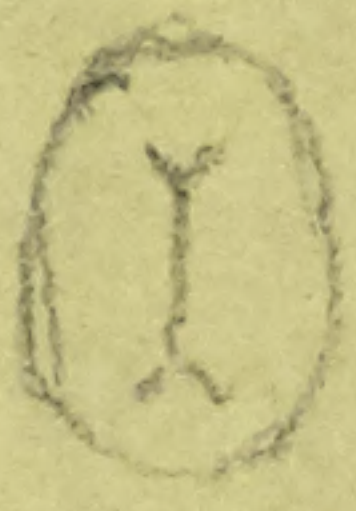
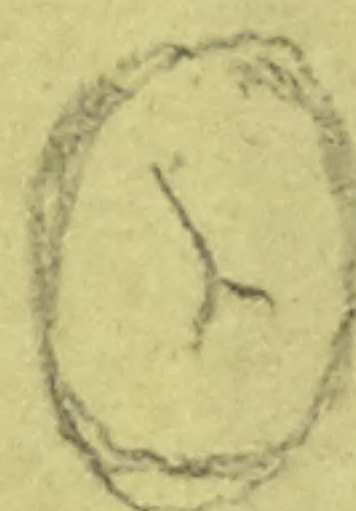
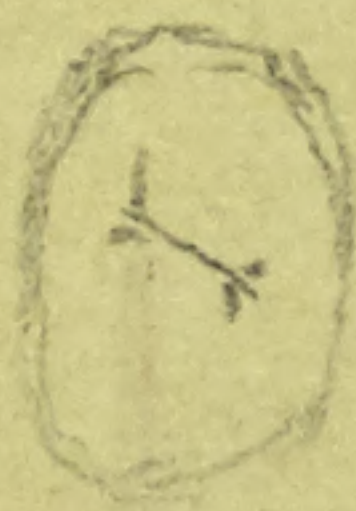
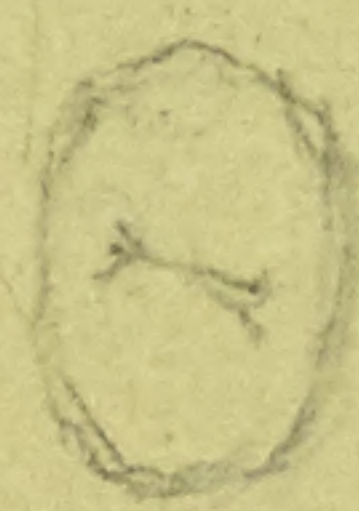
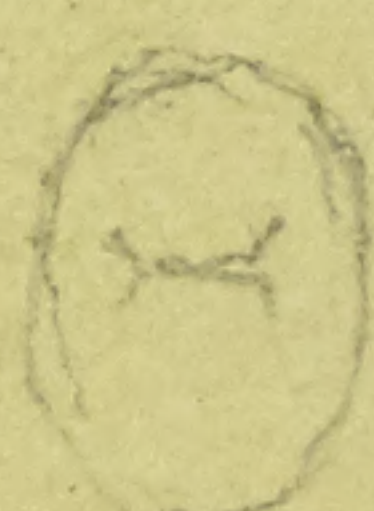
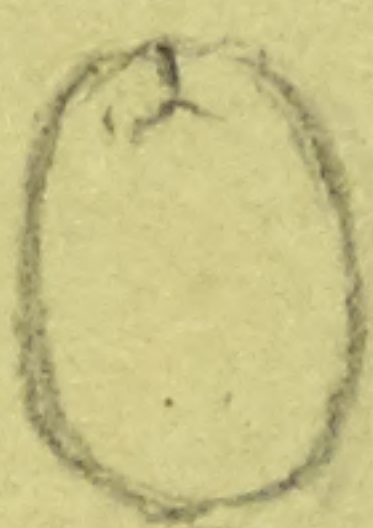
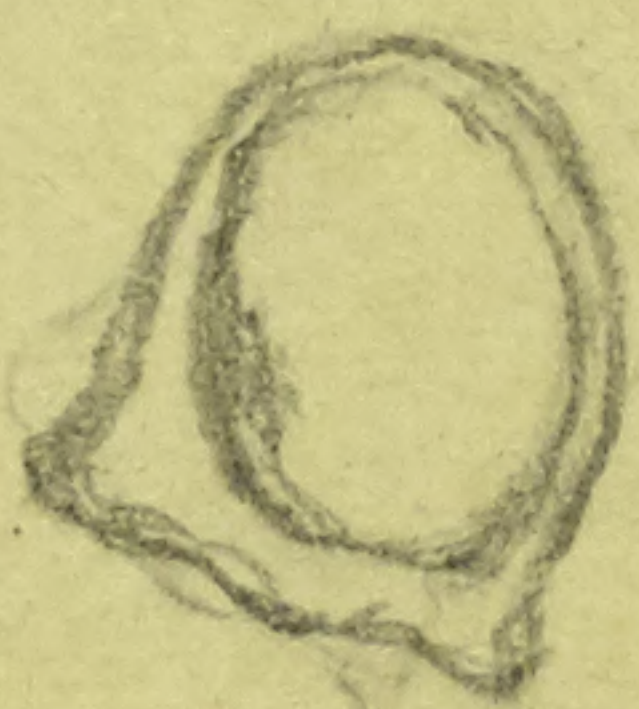
1584

Echin. Sellowianus Link & Otto

May 25 1870

Vienna, Baumann, 1857

more erect.



2

3

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2

2

upper, cotyledonary end of embryo smaller than lower one in most or all Rhodostigma

hilum



micropyle



different parts

of surface of seed x 60

tubercles rough and opaque not shining

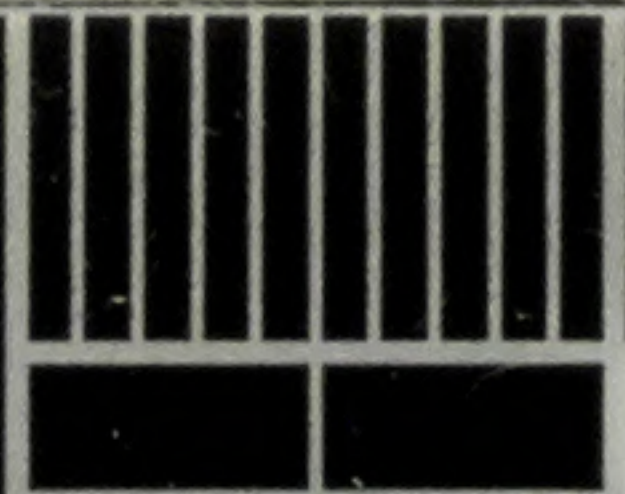
12 embryos examined;

5 contrary or nearly so (Cereus)

3 oblique

4 parallel or nearly so (Echinocactus)

but only 2 straight out contrary
and 2 — — parallel



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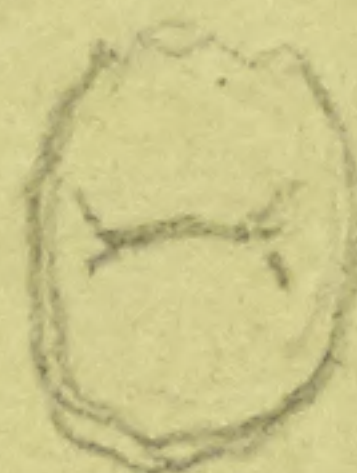
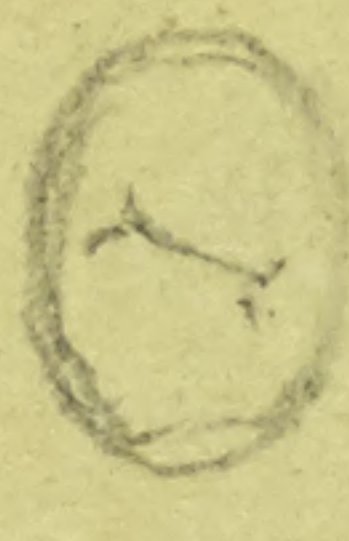
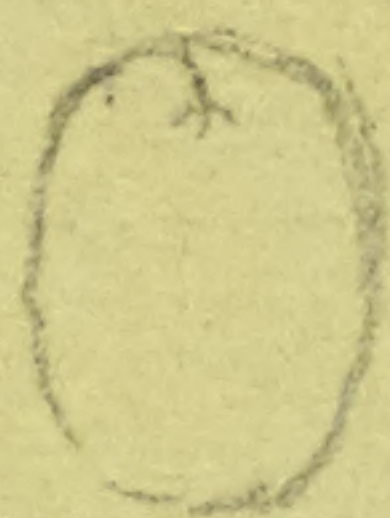
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Ech. erinaceus

May 26 1870

H. B. Lippig 1857

x 8



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seed blackish

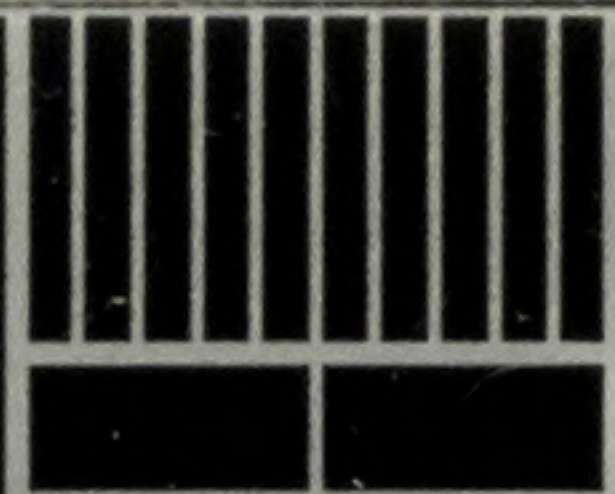


surface x 60

tubercles

rugulose

1585



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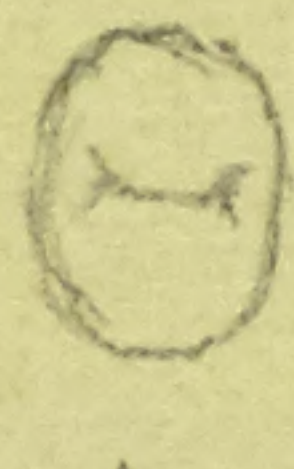
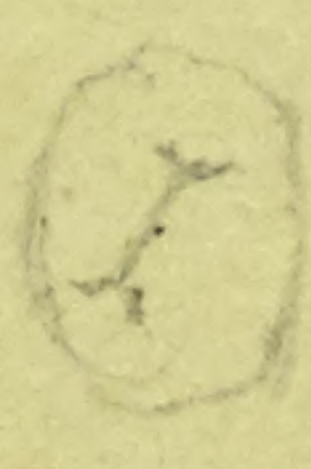
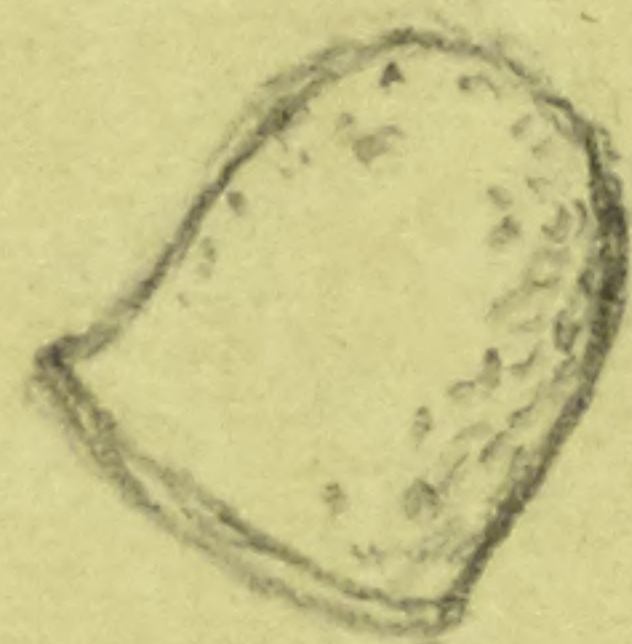
Echin. corynodes

May 26 1870

Vienna, Baumann 1857

1586

x 80



embryo almost terete

stylus mostly oblique

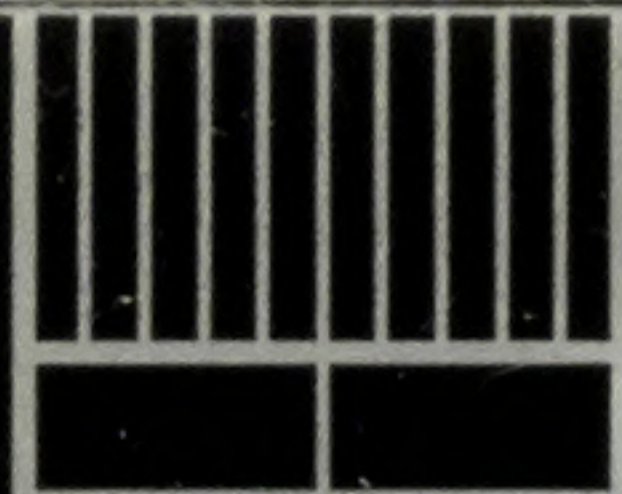


seed dark gray



surface x 60

Submolecules somewhat square or rectangular
more or less in rows
and rough and
pitted on surface



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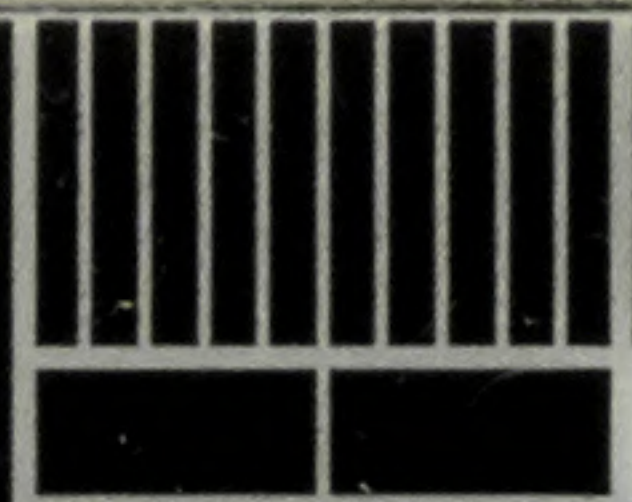
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Prag, July 10th at Hanke's

1869

Hybrids of *Ech. Ottonis* ♂ and *Ech. submamulosus* ♀ (= *mamulosus*)
P. *Ottonis* 12 ribs *Ech. mam.* 20 ribs, hybrid 14 ribs

Hybrid has stouter, bright brown spikes and fewer than *Ottonis*
tubercles between areolae not so prominent as in *mamul.*
while *Ottonis* has none — on the whole the plant is more
like the mother

Another hybrid between same parents is much more
like *Ottonis*

Baumann in Vienna has raised seeds from the
former form and there^{truly} reproduced the ~~plant~~ hybrid

1587



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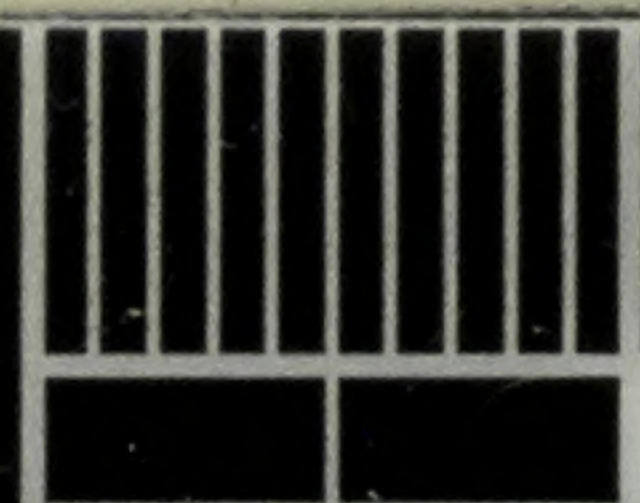
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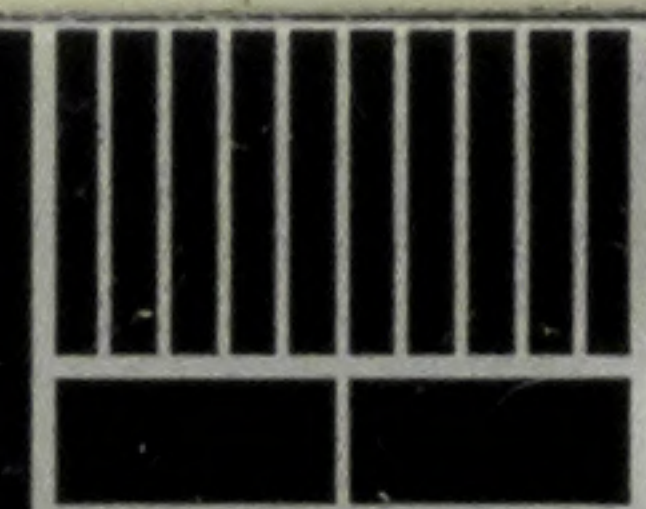
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Hort. Col. Vindobon. July 28 1867

Pikinoxanthus (Malacocarpus) corymbosus

1588

Nectarium cavity extremely small, say $\frac{1}{2}$ - $\frac{2}{3}$ mm -
Staminate part of tube 9 ^{200 m} both purple!
filaments saffron yellow, red at base,
style pale yellowish white, slightly 8, petals
orange purple or orange petals sulphur yellow
in several series, numerous, shorter, narrower, dentate,
filiculate, acute
Flower $3\frac{1}{2}$ cent wide and long, 8. 30-35 petals, sulphur yellow
in several series, acute, fringed-dentate, inner ones narrower
shorter more acute, outer obtusish, cuspidate; sepals, inner ones
40-45, obcordate with recurved dark mucro, outer sepal lanceolate
unimucronate.



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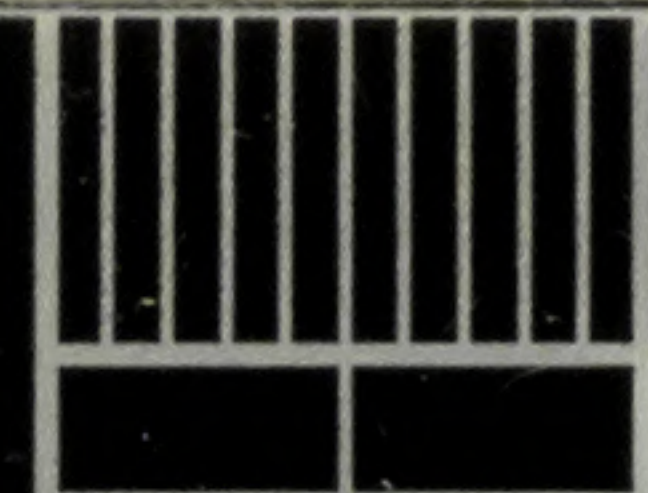
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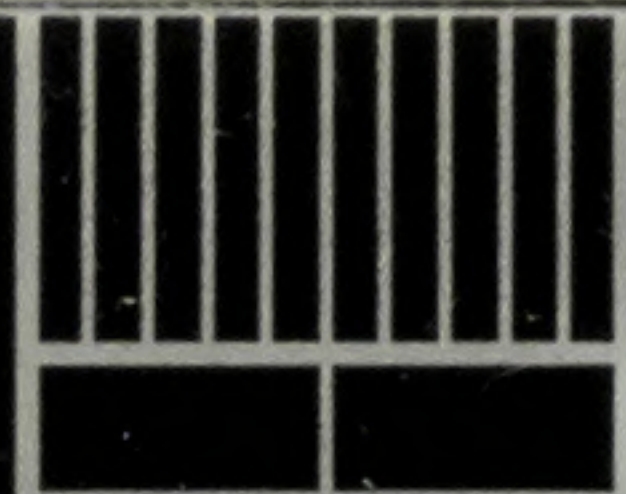
Pchiocarya subina

Jun 24 1866
several flowers open

22-25 petals linear oblong obtuse denticulate
at apex

9-11 obtuse thick cretish stigmata

1589



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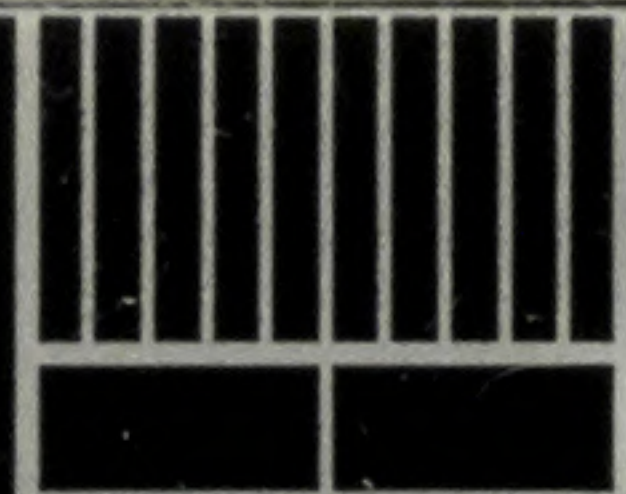
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ALEX. LEITCH
APOTHECARY & PHARMACEUTIST
COR. 4TH & OLIVE STS. ST. LOUIS



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Chenopodium mammosum

1590

H. first time
June 19 1866

27 petals 8 erect purple stigmata, thick stem
fl. 22 lines long 27 lines - full expanse



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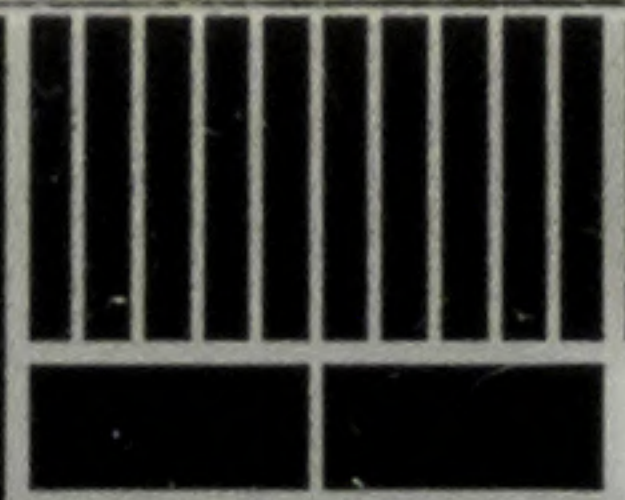
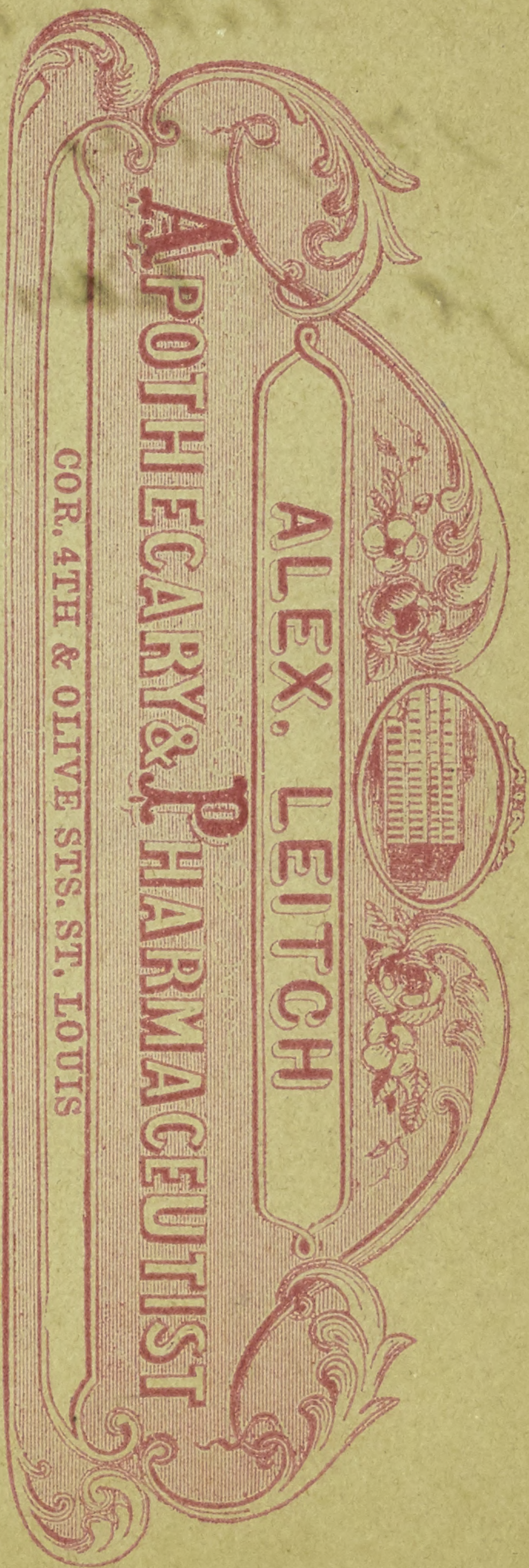
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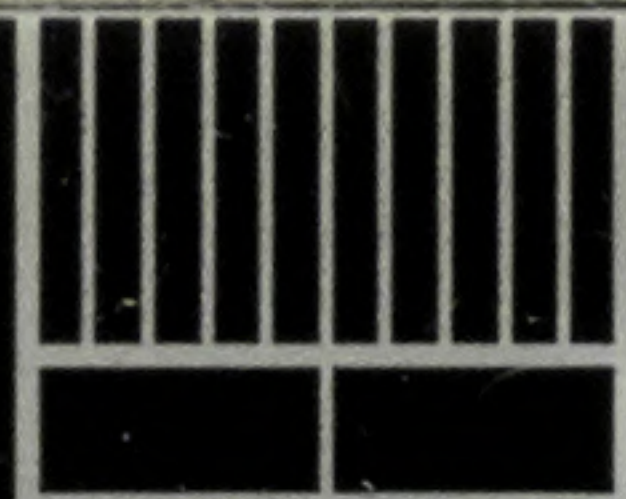
Chenopodium Ottonii

Jun 24 1866

35-40 linear-lanceolate aristulate petals

12-13 small acute stigmas erect-petals

1591



0 1 2 3 4 5 6 7 8 9 10

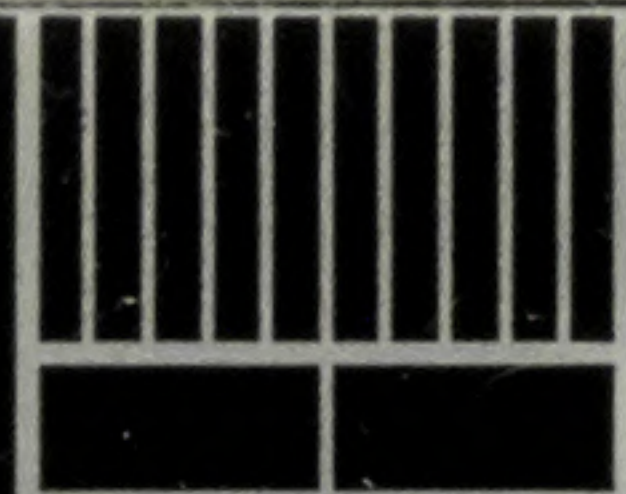
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Frankfurt Febr 1857.

Ech. tenuiflorus

(coll. Jacobi)



lateral

dorsal

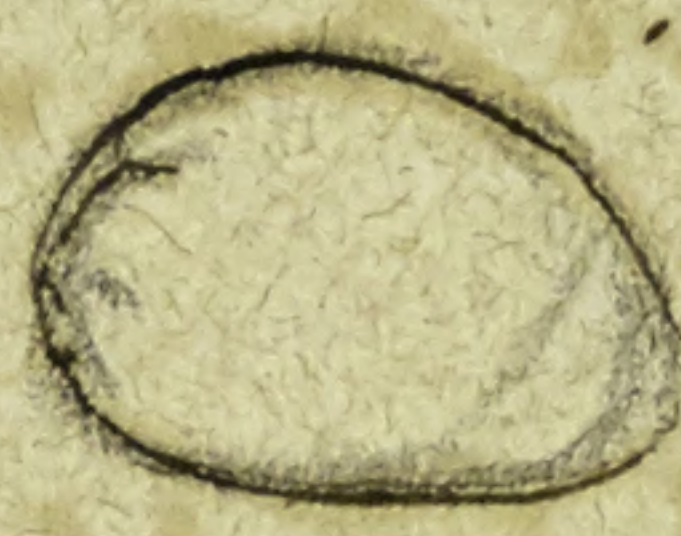
base



endopleura



basal view



lateral



top

view of embryo



sect.




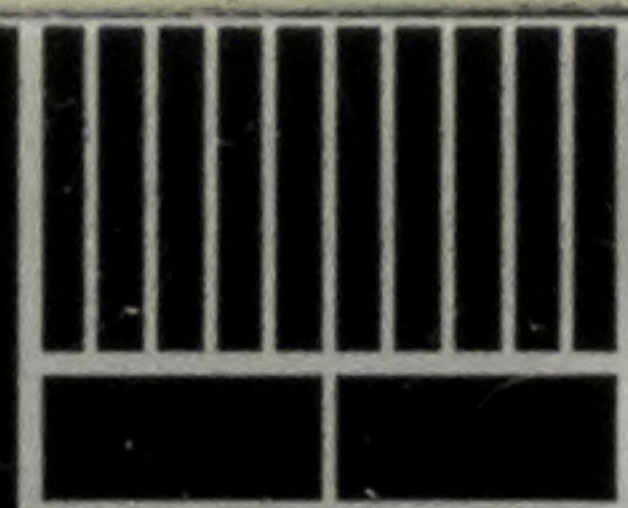
front

0.6-0.7 ; slightly reticulate, black shining slightly carinate ; hilum almost circular very large. endopleura with two thickenings, one anterior, a slighter one posterior, corresponding with the two openings in the hilum.

Embryo flattened or depressed; exalbuminous, oblique anterior subparallel or a little oblique, very small.

1592

These seeds have been represented as having the hilum basal, but the direction of the Embryo indicates that they ought to be placed with the hilum ventral or rather subventral; in other words, the seed ought to be placed in this direction  basal would be dorsal, ventral would be top, top dorsal. etc. and dorsal basal. over



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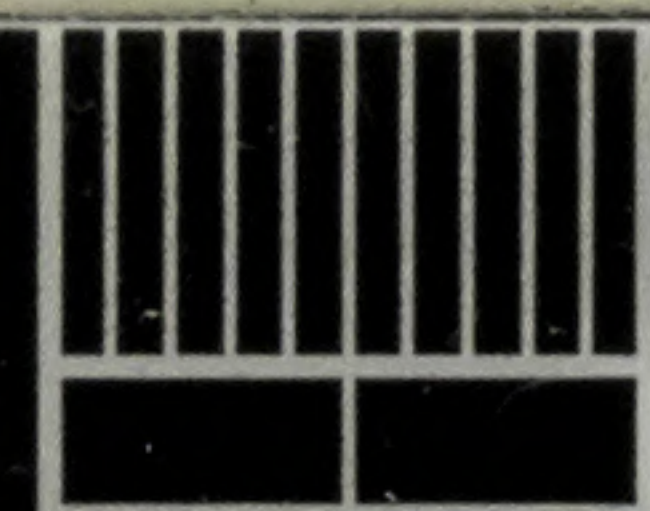
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~~the endopleura has two thickened places~~
the endopleura has two thickened places
one at the usual place, i.e. front
just below the Cotyledons; the and
corresponding with the upper part of
the hilum, or the upper opening, i.e. if
the lower thickening is at the base of the
embryo, corresponding with the lower
larger opening in the hilum.

^{Echinops stenogoni}
Seds similar to ~~Phyllanthi~~: black reticulate testa, subglobose
(digitaliform) large hilum which, apparently basal, is really subventral or ventral
if the embryo is considered erect, — no album; cotyled. very short — oblique
or nearly parallel #



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Echinosactus curvispinus Osten
Chili Osten

Herb. Berlin 1869



12 spines straight

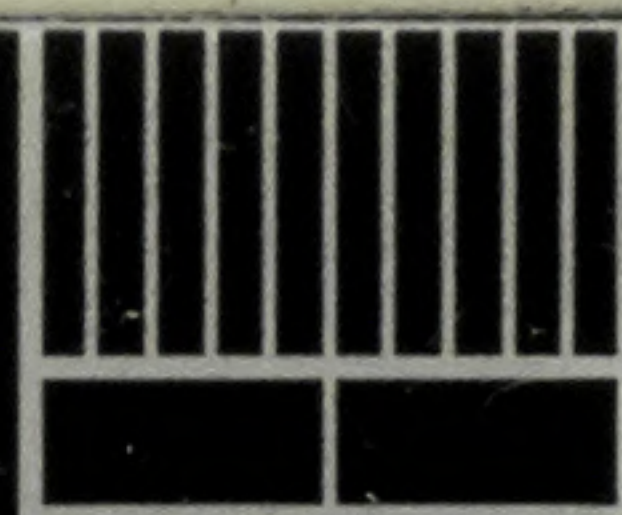
sepals numerous, imbricate, lower
dentate, with a good deal of wool
in axil

Echinosactus,ellow. 3191. 1827 larger

— — — 3193 smaller flower

both similar, involucre - brown wool
allied to *Ech.* and others
with the red stigmas; brown wool with
brown spines densely enveloping; Calyx x

1593



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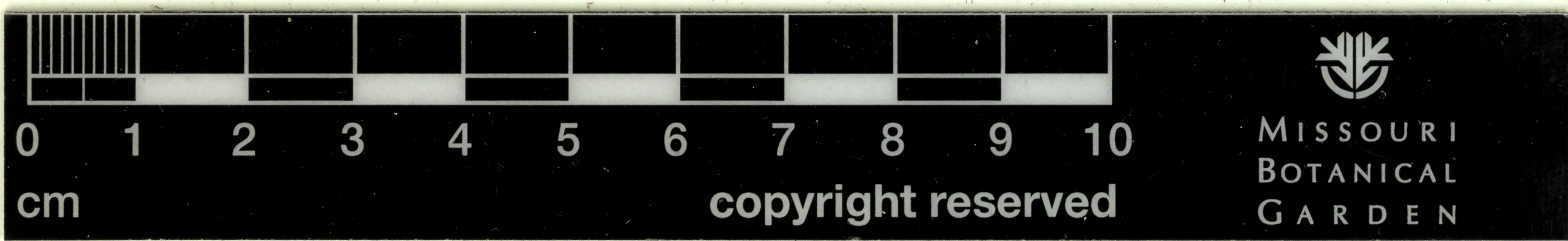


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Handwritten notes, mostly illegible due to fading and bleed-through from the reverse side.

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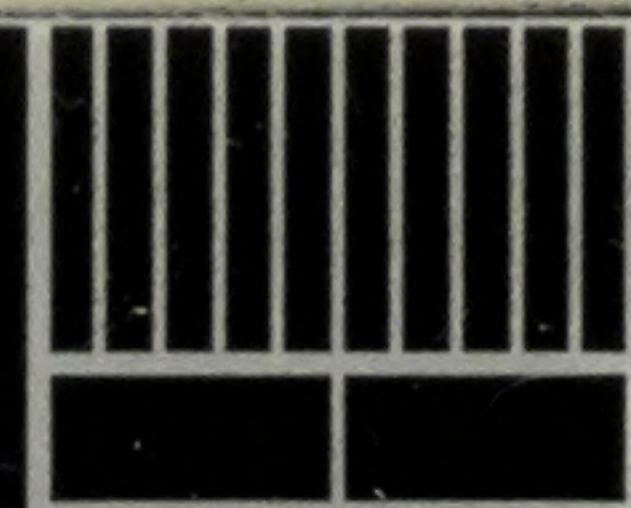
Handwritten notes, including the date '1857' and other illegible text.



Pch. Sellowianus and acutus very similar;
flowering throughout the season; flowers yellow,
1 inch long, externally covered with wool, produced
from a very woolly top. 1594

P. conynodes said to be very distinct from last,
but flower apparently very similar in flower
at least from external appearance. —

H. Schreger, Münster
Jan 1857



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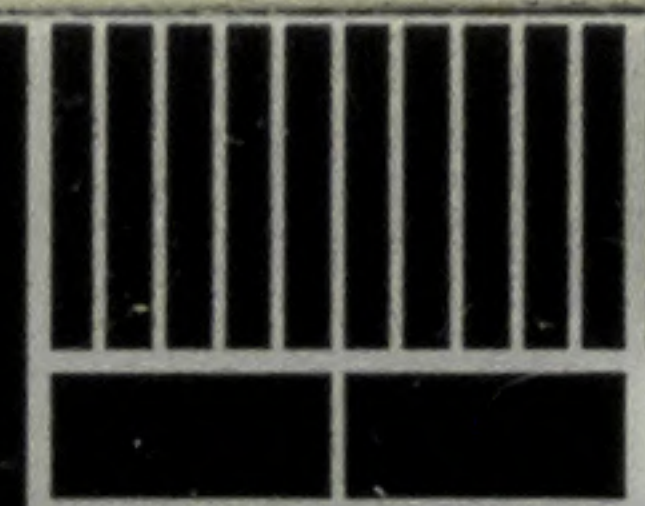
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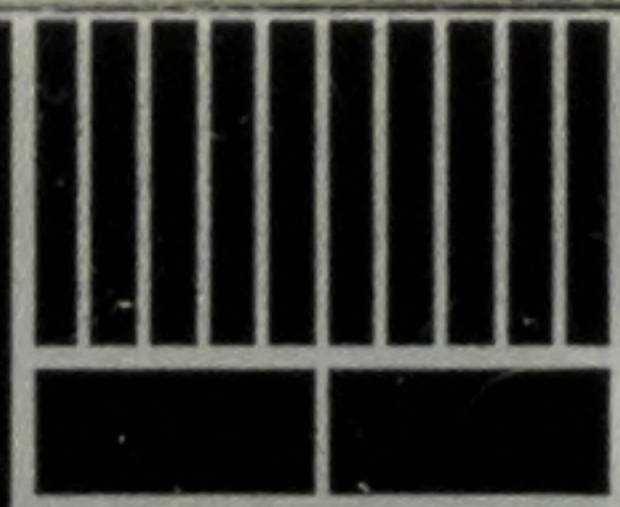


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Jacoby Coahuila
Hort. Schaffneri Memoranda Jan 1857

1595

Echeveria seemii sp. large yellow flowers, ovary & tube
covered with sepals in the axils of which brown wool
and bristles.



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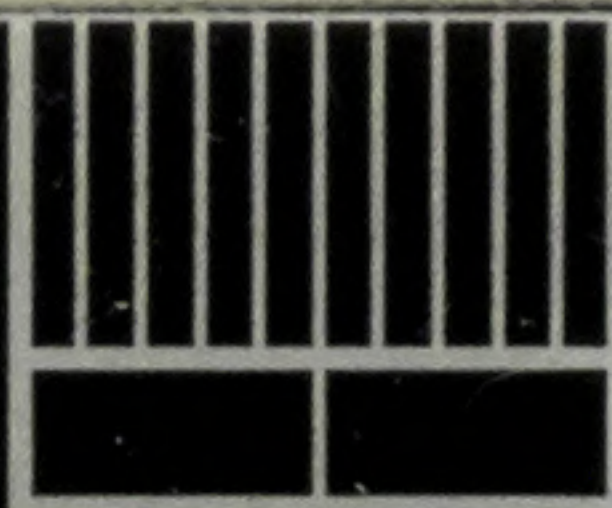
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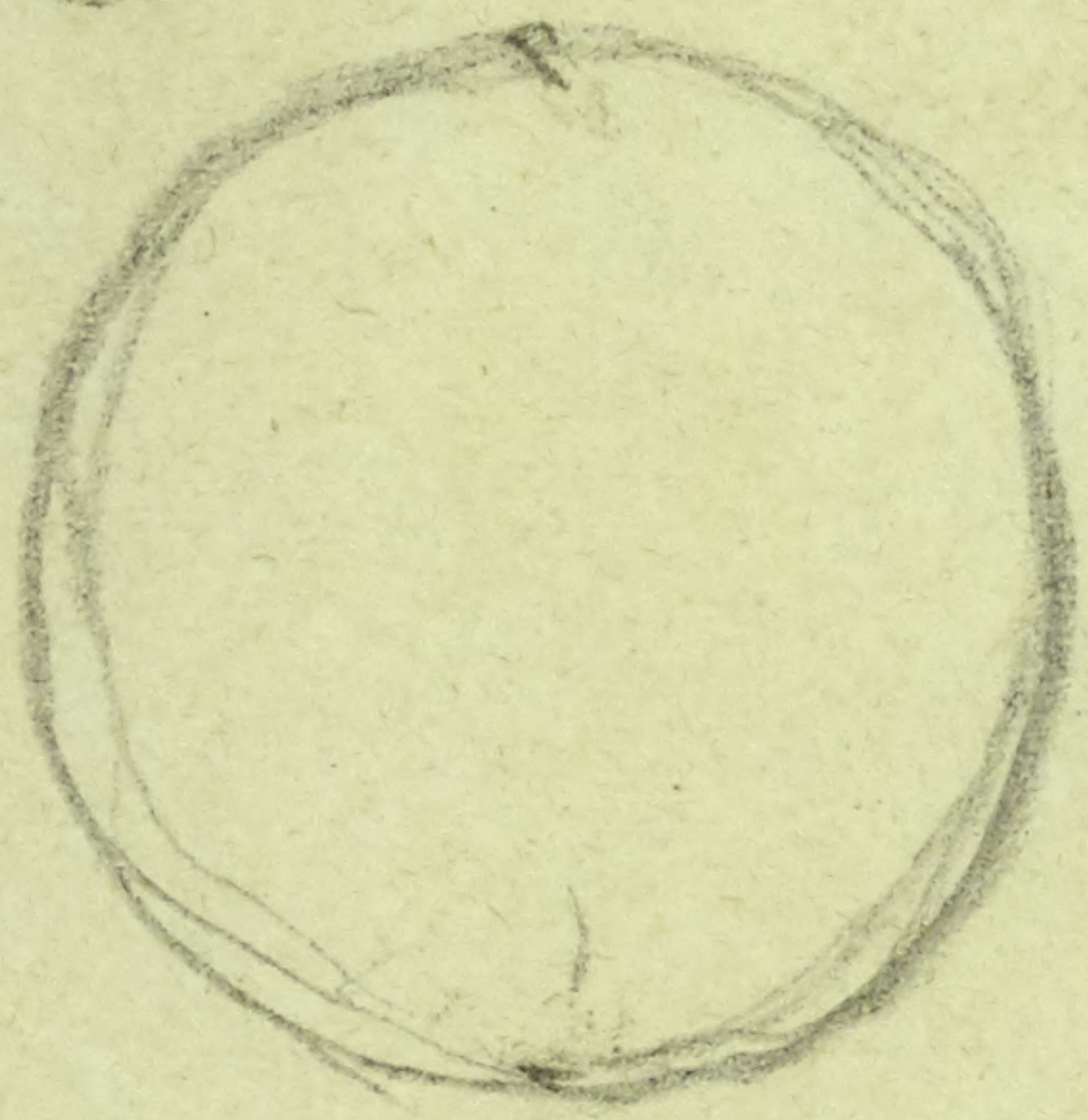


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7412

Pollen of
Ech. Scopa

June 1860



fl. deplorat

different shapes

probably from different
stages of development

1596



Pollen 0.026 lin
Diam.

Echinoscopy Scopa

13 1/2
Oval 13-14 lin
60 to.

Hort Goebel

St Louis

May 22
1860

1597

from
young growth
role
the



Poll 12 1/2 ~ 13 lin
412 412
granulated



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0 1 2 3 4 5 6 7 8 9 10

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cm

ALEX. LEITCH,

APOTHECARY & PHARMACEUTIST,

Marble Building, Cor. Fourth & Olive Sts., St. Louis, Mo.

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SOUTH-EAST CORNER OF

M. W. A.



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Ecklonia scoparia

Hort Goebel

S. L. Schumacher

May 22

1897

1860

$\frac{13\frac{1}{2}}{60}$ oval $\frac{13-14}{60}$ lin

flowers from
the young growth,
in a circle
around the
vertex



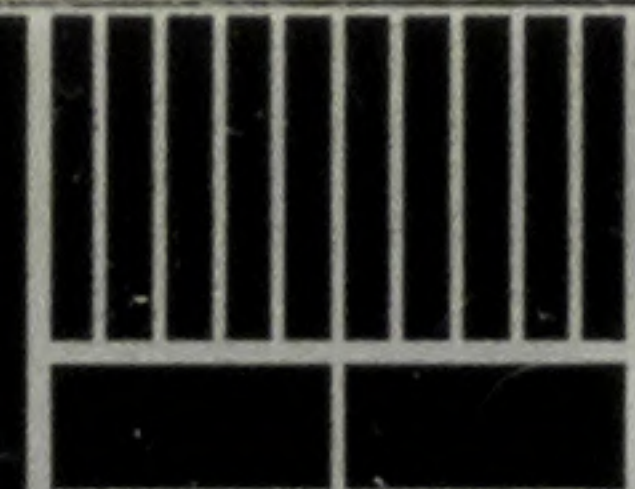
Poll $\frac{12\frac{1}{2}}{412}$ ~ $\frac{13}{412}$ li
granulated

numerous lanceolate subulate

fleshy green scales on ovary
at lower part of tube with
abundant wool (white under-
neath, brown above) and
about 3 brown bristles in the
axils — wool enveloping the
whole ovary & tube.

fundamentally twice as long
as oval, simple
or branched at base
style all deep red, stigma entirely
10 erect, 1 line long.

20 - 25 upper sepals, petaloid, pale yellow, lanceolate
about 30 oblong oblanceolate or cuspidate, acute
or imbricated or denticulate petals, lanceolate
stamens from base of shallow tube about 3 lines, yellow



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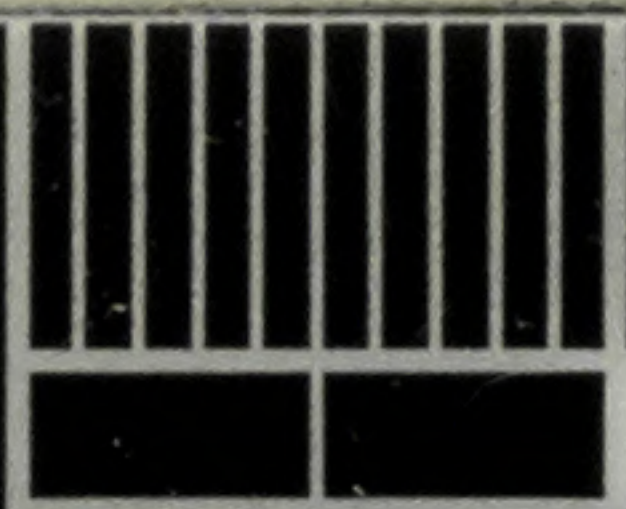


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M. W. ALEXANDER,

SOUTH-EAST CORNER OF FOURTH AND MARKET STREETS,
ST. LOUIS.

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